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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,994	07/25/2001	Jean-Paul Cerveny	PVMT1	4697

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EXAMINER	
CHORBAJI, MONZER R	

ART UNIT	PAPER NUMBER
1744	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/889,994	CERVENY, JEAN-PAUL	
	Examiner	Art Unit	
	MONZER R. CHORBAJI	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *30-62* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *30-62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This final action is in response to the amendment received on 04/04/2005

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 30-39, 41-53, 55-58 and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by Petho (U.S.P.N. 4,958,649).

With respect to claim 30, the ('649) reference discloses an apparatus for sterilizing articles such that stoppers to be treated move in a helical path (col.4, lines 51-60, the stoppers travel in a circular and continuous curve around a central point of rotation and not receding or approaching the point of rotation) within the apparatus and between the inlet (figure 1: 8), which is at first end and the outlet (figure 1: 9), which is at a second end such that both ends are opposed to each other. The ('649) reference also mentions that the apparatus is placed upstream of the screwing machine (col.12, lines 45-56). Both machines are connected such that it is inherent that they operate at the same rate in order to sterilize the stoppers in the most efficient method.

With respect to claims 31-39, 41-53, 55-58 and 60, the ('649) reference teaches the following: the sterilizing machine defines a longitudinal axis, which extends through the sterilizing machine such that the first end of the machine opposes the second end of the machine along the longitudinal axis (figure 3, longitudinal axis of rotation of shaft and figure 1: 8 and 9), three successive sterilizing, rinsing, and drying sections (col.9,

lines 53-55, col.10, lines 16-17 and lines 41-46), parts are set in motion by friction against a rotating member (the rotational motion of the conveying system will inherently set the parts in motion due to friction against the rotating member), a conveying rotational system formed of a hollow helical sleeve (figure 3: 13) secured to a stationary drum (figure 3:13, 4 and 3) and wound around the exterior wall (exterior wall of 13) such that the slideway has a U shape profile (partial part of 13 is a U shape) open toward the sleeve and a height shorter than that of the stoppering parts so that the friction between the rotary drum and the stoppering parts causes them to move, the bottom of the helical screw includes multiple holes (col.5, lines 27-31) with many nozzles (when steam is injected through the holes, then they are considered nozzles) to inject a sterilizing solution, the holes are directed in an inclined direction (depending on the degree of rotation of the helical conveying system such a limitation is inherent to the apparatus of the applied reference) with respect to a radius of the drum, a suction cavity (figure 2: 3 where fluid collects) that is inherently offset with respect to the vertical plane of the symmetry of the drum due to it's rotation, a barrier means to prevent the liquid from running over the ends of the drum (col.8, lines 54-57), the helical slideway provides transition arrangements between the different sections (each plate can inherently depending on the treatment cycled can be considered as a transition arrangement or as mentioned in col.13, lines 18-19), the sterilizing solution is injected by a nozzle into a pressure-equalizing chamber (figure 2: wall of 13 and external wall of 1 constitute the chamber), a groove is provided on the interior face of the rotary drum (col.13, lines 11-15), the stoppering parts are set in motion along a helical path by a driving fluid (the

injected hot water will inherently result in the motion of the stoppering parts), the use of hot water (col.9, lines 66-68), the sole of the helical slideway having openings for injecting the driving fluid (the bottom part of 13 is equivalent to the sole), the helical slideway is made by a profiled separation (figure 2: 40), the sole is a flexible metal strip (inherent limitation since steam is injected within the apparatus) wound between the separations and resting on two shoulders (figure 1: 45), modules of identical design assembled in series and closed at both ends (col.12, lines 45-48), a hopper for collecting rejections is provided at the outlet of each module (figure 1: 9 and figure 2 where liquid is collected in the bottom part below 13) at least one slit is provided at the outlet of each module and on its sleeve (the draining holes in the conveying system mentioned in col.5, lines 27-31 are equivalent to the slits), a standard module with several turns such that the upper part of the last turn of which carries out the function of rinsing with air and the previous turns or front turns performing the sterilizing function (all such features are inherent since depending on the degree of rotation and on the cycle, the upper part of the last turn of 13 carries the function of rinsing and the previous turns of 13 are for sterilizing the stoppering parts), orifices (figure 2: 10-12) for the passage of liquid-injection nozzles (col.5, lines 27-31) oriented at a driving angle (inherent feature of the rotating drum) are provided in the sole of each turn, one of the orifices (figure 2: 10) is provided in the bottom part of each turn (figure 2: plate13 above 10) on the vertical plane of symmetry, a cylinder coaxial with the cylindrical sleeve delimits a cylindrical discharge space (figure 2: 3 and bottom of 13), and an air inlet inside the module distributes air to one air-injection nozzle for driving the stoppering

parts in a helical path, then to at least one second air-injecting nozzle for internal rinsing of the stoppering parts, then to at least one third air-injection nozzle for external rinsing of the stoppering parts (col.5, lines 27-31 and col.10, lines 43-44 such that each inlet represent a nozzle through which air is injected).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 59 and 61-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petho (U.S.P.N. 4,958,649).

With respect to claims 61-62, the ('649) reference does not explicitly indicate whether the apparatus is vertically or horizontally arranged, however; such arrangements are a matter of choice of design that is well within the scope of the artisan. The disclosure does not teach significance to the vertical arrangement.

With respect to claim 59, the ('649) reference does not explicitly disclose the shape of the discharge holes, however, choosing a shape for the discharge holes is a matter of choice of design that is well within the scope of the artisan. The disclosure does not provide significance to the oblong-shaped discharge holes.

5. Claims 40 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petho (U.S.P.N. 4,958,649) in view of Zucchini et al (U.S.P.N. 5,098,447).

The teachings of the ('649) reference have previously been set forth with respect to claims 30-39, 41-53, 55-58 and 60. However, with respect to claims 40 and 54, the ('649) reference fails to teach filtering, heating and recycling the sterilizing liquid. The ('447) reference, which is in the art of sterilizing stoppers by using aqueous solution of hydrogen peroxide, teaches recycling the liquid sterilant (col.3, lines 53-56). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of the ('649) reference to include recycling means as disclosed in the ('447) reference such that in order to sterilize the stoppers it is intrinsic to filter and reheat hydrogen peroxide.

Response to Arguments

6. Applicant's arguments filed 04/04/2005 have been fully considered but they are not persuasive.

On pages 14-15 of the Remarks section, applicant argues that, "This is to be distinguished from the apparatus disclosed by Petho, in which the stoppering parts are caused to pass along a path which is most accurately characterized as a spiral path".

The examiner disagrees. The Stoppers in the Petho reference travel in a circular and continuous curve around a central point (col.4, lines 51-60) of rotation and not receding or approaching the point of rotation, i.e., helical path within the apparatus and between the inlet (figure 1, 8), which is at first end and the outlet (figure 1, 9), which is at a second end such that both ends are opposed to each other. As a matter of fact, each stopper in the Petho reference moves along a curve and not getting closer or further from the point of rotation and thus can inherently be traced on a cylinder by the rotation of a point crossing its right sections at a constant oblique angle.

On page 15 of the Remarks section, applicant argues that, "This is to be distinguished from the inlet and the outlet for the stoppers being operated upon by Petho, which are longitudinally aligned with each other, and laterally separated from each other as is best seen in Figure 1 of the Petho." The examiner disagrees. Looking at figure 1 of the Petho reference, the inlet (figure 1, 8), which is at first end and the outlet (figure 1, 9), which is at a second end such that both ends are longitudinally separated from each other.

On page 15 of the Remarks, applicant argues that, "Applicant's apparatus is not only capable of employing a driving fluid for setting the stoppering parts in motion along the helical path developed for them, but is further capable of using only the driving fluid for such purposes, eliminating the need for rotation of the resulting apparatus." The apparatus of the Petho reference uses pressurized steam and sterile gas to sterilize and dry the stoppers such that both steam and sterile gas are inherently capable of setting the stoppers in motion along a helical path just like the apparatus of the instant claims.

In addition, non of the instant claims recite of using only the driving fluid and eliminating the need for rotation of the resulting apparatus.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

8. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R. CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 6:30-3:00.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN KIM can be reached on (571) 272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monzer R. Chorbaji MRC
Patent Examiner
AU 1744
06/24/2005

JOHN KIM
SUPERVISORY PATENT EXAMINER